

REMARKS

Claims 1-22 were pending and rejected. Claims 1, 5-8, 10, 15 and 18-22 are being amended. Reconsideration is respectfully requested.

In paragraphs 4-6, the Examiner rejected claim 21 under 35 USC § 102 over Raab. Raab discloses a switched network 100 having Ethernet switches 131-133 and VLAN devices 410. A member policy table 500 enables a network manager to explicitly specify VLAN membership of specified "end-stations" by an internet protocol. A member type field 503 in the table 500 enumerates how the member is specified. An integer value in the member type field 503 indicates either an IP address or a VLAN port. (See figures 1a, 4, 5, 19; column2, lines55-66; column 4, lines 39-60; column 8, lines 53-67; column9, line1-7.)

Claim 21 as amended requires "allocating a dedicated storage resource to each VLAN segment" and "determining a VLAN segment that the server belongs to, based on a VLAN identification in the IP packet." Raab does not teach how to allocate dedicated storage resources to a VLAN segment to virtual storage volumes in a storage system. Accordingly, Applicant submits that claim 1 is patentable over Raab, and respectfully requests that the rejection be withdrawn.

In paragraphs 7-29, the Examiner rejected claims 1-20 and 22 under 35 USC § 103 over Raab in view of Aziz. Aziz (USP6,597,956) discloses a virtual server farm created out of a wide scale computing fabric.


Claim 1 as amended requires "the processor, the memory, the storage controller and the network interface [to be] operable to control the virtual local area network (VLAN) switch to map the at least one segment to the at least one virtual volume based upon the configuration information." Claim 10 as amended requires "mapping the first virtual local area network to the first virtual volume and the second virtual local area network to the second virtual volume to form a configuration" and "routing information from the first virtual local area network to the first virtual volume and the second virtual local area network to the second virtual volume and

preventing communication from the first virtual local area network to the second virtual volume and from the second virtual local area network to the first virtual volume based upon the configuration.” Claim 15 as amended requires “code for routing information from a virtual local area network to a virtual volume in the file system and preventing communication from at least one other virtual local area network to the virtual volume based upon a configuration.” Claim 18 as amended requires “wherein the means for processing and the means for connecting to a virtual local area network (VLAN) switch are connectable to an external storage device having at least one virtual volume mapped to at least one segment of a virtual local area network (VLAN) based upon configuration information, thereby preventing communication between another segment of another VLAN and the at least one virtual volume.” Claim 19 as amended requires “wherein the means for processing, the means for controlling storing of information and the means for connecting to a virtual local area network (VLAN) switch map at least one segment of a virtual local area network (VLAN) to at least one virtual volume of the means for storing data based upon configuration information and prevent communication between another segment of another VLAN and the at least one virtual volume.” Claim 20 as amended requires “wherein the storage device is operable to control the virtual local area network (VLAN) switch to map the at least one segment of the at least one virtual local area network to at least one virtual volume of the storage device based upon configuration information, and is operable to prevent another segment of another VLAN from communicating with the at least one virtual volume of the storage device.” Claim 22 as amended requires “assigning at least one virtual volume to each one of the plurality of segments, such that a virtual volume will communicate only with a segment to which it is assigned.” Neither Raab nor Aziz shows how to control access to a virtual storage volume by a VLAN segment, as recited by independent claims 1, 10, 15, 18-20 and 22. Accordingly, Applicant respectfully submits that claims 1-20 and 22 are patentable over Raab in view of Aziz, for at least these reasons, and respectfully requests that the rejection of claims 1-20 and 22 be withdrawn.

If the Examiner has any questions or needs any additional information, the Examiner is invited to contact the undersigned.

Respectfully submitted,

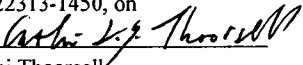
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